develop into more or less perfect flowers. I send you a figure which illustrates the appearance of one of these peculiar forms The shrub flowers very early in the spring, and ripens a short, thick pod, containing from one to three large red seeds, called Indian beans, which are said to be poisonous to children, who sometimes eat them.

Mr. J. H. McArthur writes: "Our Angora goats browse freely on the shrub, and frequently swallow the beans without ill effects, but that may be owing to these being too hard for their teeth to crack, as they are found about the pens, having passed through them unbroken."—GEORGE VASEY.

Thalictrum purpurascens, var. ceriferum, in North Carolina.—Though this species of Thalictrum is not mentioned in Chapman's Flora as occurring in the Southern United States, nor in Curtis' "Catalogue of the Indigenous and Naturalized Plants of the State of North Carolina," yet I have found several plants of the variety ceriferum growing luxuriantly on rocks at Flat Rock, Henderson county It grows to the height of five feet and agrees in all respects with the description given on page 39, Gray's Manual, the fruit and leaves being covered with "waxy atoms" and "exhaling a peculiar odor;" it was in full flower May 24th.—E. R. MEMMINGER, *Flat Rock, N. C.*

Dry weather foliage of the Compass plant.—This immediate section of country has been subjected to a prolonged and severe drouth. There has been not far from one inch of rainfall since the last snow-storm of early March. In addition to this we had a very dry summer and autumn last year, so that the rainfall has been unusually light for a whole year. Nearly all wells that never fail in ordinary seasons are now dry, and the college campus exhibits the strange appearance of a brown and apparently lifeless turf studded with dwarfed red clover plants which are in feeble bloom. The leaves upon trees and shrubs are fewer than usual and much reduced in size.

There are a few kinds of plants that seem to flourish under the peculiar arid conditions which now obtain; but even these are somewhat changed in their general appearance. The foliage of the compass plant (*Silphium laciniatum* L.) is particularly noticeable at this time. The leaves of this composite have a strikingly refreshing glossy green which is in sharp contrast with the surrounding dwarfed and dried herbage. But when the foliage is compared with that of its own species, in former years, a great change is seen. There may not be very much difference in the relative size of the leaves of this year with those of last season, but they are more numerous, and each leaf exposes far less surface to the hot, drying sun. In short, the average leaf of this Silphium is reduced to the midrib, with a thin web of green tissue upon each side, and its many lateral veins and their sub-veins bearing narrow ribbons of pulpy tissue. In other words, the foliage, true to the specific name, is very

thoroughly slashed or laciniated. A protracted search was rewarded by finding only two leaves which exhibited the broad and comparatively simple blade so frequently met with in ordinary seasons. There are some plants which grow in a grass field near a walk frequently passed over by the writer, and these have been watched for the last two years. These same plants have now pronounced twice pinnately parted leaves which last year and in 1885 produced several radical leaves, with broad surfaces interspersed with the "holes" or vacant places in the laminæ so familiar to every botanist in the west.

There is also a difference in the position which these much laciniated leaves assume. They are numerous; without the rigidity of normal leaves, and assume a curved or drooping attitude. More than this, they curve outward and downward about equally from all sides of the centre of the plant. In other words, in the present condition of the plant there is very little indication of polarity, and the weary traveler over the dry and scorching prairie would now find a better guidance by noting the positions of the unclouded sun than to try to gain his "reckoning" by relying upon the compass plant.—BYRON D. HALSTED, *Botanical Laboratory, Ames, Ia.*

Course of study in Fungi.—After several years of changing and experimenting, the course in the study of fungi at the University of Michigan has taken its present shape, which is substantially as follows:

The class, having already studied botany for a year or more, are familiar with the leading facts of vegetable histology, and have made a careful study of one or more typical representatives of the great classes of plants, both cryptogamic and phanerogamic, and have also done enough work in systematic botany to be able to identify species readily. Moreover, as the course can not be elected until after one or two years have been spent at the university, those who pursue it have already acquired some knowledge of French and German, and are expected to read in both those languages selections from the most important modern literature of the subject.

The first thing aimed at is to secure a reasonable degree of familiarity with the group as a whole. Notes are given on the Peronosporeæ, Uredineæ, Ustilagineæ, etc., and specimens examined in a cursory way, so that their general appearance, the hosts on which they occur, and such other general facts as are most essential to be known at the outset, are easily acquired In connection with this class work, about ten hours a week are spent in the laboratory in identification of species. Sets of ten species each, put up in envelopes, are handed to a student, and at the end of a week or two he reports upon them. The envelopes are marked on the back like this: No. 1. On Capsella Bursa pastoris, Ann Arbor, May 21, 1887. No. 2. On leaves of cultivated peach, Ann Arbor, June 3, 1886, etc.